



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,371	12/15/2000	Franck Barillaud	AUS920000805US1	9807

7590 04/21/2005

Frank C. Nicholas
CARDINAL LAW GROUP
1603 Orrington Avenue, Suite 2000
Evanston, IL 60201

EXAMINER

CHEA, PHILIP J

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/738,371

Applicant(s)

BARILLAUD ET AL.

Examiner

Philip J Chea

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

hcl

DETAILED ACTION

This action is in response to an Amendment filed December 2, 2004. Claims 1,2,4-12,14-20, are pending in this application. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the map" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. Claims 1,2,4-12,15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anerousis et al. (US 6,760,775), herein referred to as Anerousis, and further in view of Liron (US 5,598,532).

As per claims 1,15, Anerousis discloses a method for allocating a service on a network, as claimed, comprising:

- collecting a set of performance data representative of a set of physical characteristics of the network (see column 8, lines 17-45)
- identifying a plurality of node clusters (see column 8, lines 17-45);
- correlating at least one property of each of the identified node clusters with at least one performance rule to determine a compliance of the node cluster to the performance rule (see column 8, lines 45-53); and

Art Unit: 2153

- allocating the service to one of the complying node clusters (see columns 8 and 9, lines 62-67 and 1-4).

Although the system disclosed by Anerousis shows substantial features of the claimed invention (discussed above), it fails to disclose that the identification is in response to the collection of the set of performance data.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Anerousis, as evidenced by Liron.

In an analogous art, Liron discloses collecting a set of performance data and identifying a plurality of node clusters in response to the data (see column 5, lines 19-36).

Given the teaching of Liron, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Anerousis by identifying a plurality node clusters in response to a collection of performance data, such as disclosed by Liron, in order to improve traffic flow and balance traffic flow requirements between work groups (see Liron column 2, lines 12-22).

As per claim 2, Anerousis in view of Liron further disclose providing a map as a result of said correlation, said map including a first cluster of said plurality of clusters for supporting the service on the network (see Anerousis column 8, lines 45-53).

As per claim 4, Anerousis in view of Liron further disclose wherein the map includes at least one server within the first cluster for supporting the service on the network (see Anerousis column 8, lines 17-53).

As per claim 5, Anerousis in view of Liron further disclose allocating the service to the first server (see Anerousis column 8, lines 17-53).

As per claims 6, 10, and 17, Anerousis in view of Liron further disclose wherein collecting the set of performance data representative of the set of physical characteristics of the network comprises probing the network for a round trip time (see Liron column 6, lines 42-44 and column 8, lines 3-17). In order minimize the delay time, the round trip time is implied within that calculation.

Art Unit: 2153

As per claims 7, 11, and 18, Anerousis in view of Liron further disclose wherein collecting the set of performance data representative of the set of physical characteristics of the network comprises probing the network for a hop count (see Liron column 6, lines 46-48).

As per claims 8, 12, and 19, Anerousis in view of Liron further disclose wherein collecting the set of performance data representative of the set of physical characteristics of the network comprises probing the network for bottleneck link speed (see Liron column 6, lines 54-57). In order to minimize the link bandwidth, the link speed is inherent in that calculation.

As per claims 9 and 16, Anerousis discloses a distributed computer system, as claimed, comprising:

- a plurality of interconnected nodes (see Fig. 3 [330],[335]); and
- a server operable to allocate a service for said plurality of interconnected nodes, said server including (see column 8, lines 17-45)
- a probe operable to provide a set of performance data as related to a set of physical characteristics of said plurality of interconnected nodes (see column 8, lines 17-45),
- a module operable to identify a plurality of node clusters within a network (see column 8, lines 17-45); and
- an engine operable to utilize at least one performance rule for said plurality of node clusters as related to said service to identify a first node cluster of said plurality of node clusters for supporting said service for said plurality of interconnected nodes (see column 8, lines 45-53),
- wherein the engine is further operable to provide a map representative of each node cluster in compliance with at least one performance rule as related to the service and to allocate the service to one of the complying node clusters (see column 8, lines 45-53).

Although the system disclosed by Anerousis shows substantial features of the claimed invention (discussed above), it fails to disclose that the identification is in response to the collection of the set of performance data.

Art Unit: 2153

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Anerousis, as evidenced by Liron.

In an analogous art, Liron discloses collecting a set of performance data and identifying a plurality of node clusters in response to the data (see column 5, lines 19-36).

Given the teaching of Liron, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Anerousis by identifying a plurality node clusters in response to a collection of performance data, such as disclosed by Liron, in order to improve traffic flow and balance traffic flow requirements between work groups (see Liron column 2, lines 12-22).

4. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anerousis in view of Liron as applied to claims 9 and 16 above, and further in view of Johnson (U.S. 6,078,946). Although Anerousis in view of Liron discloses substantial features of the claimed invention (discussed above), he fails to directly disclose the module being a neural network. However, these features are well known in the art and would have been an obvious modification of the system disclosed by Anerousis in view of Liron, as evidenced by Johnson.

In an analogous art, Johnson discloses a network management system, which uses a neural network module for optimizing resources (column 5, lines 41-46).

Given the teaching of Johnson, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Anerousis in view of Liron by employing a neural network module, such as disclosed by Johnson, in order to gain the best results available for a set of input data (column 3, lines 19-23).

Response to Arguments

5. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2153

Conclusion

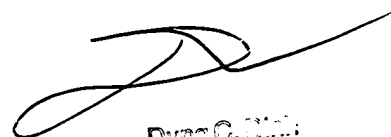
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea
Examiner
Art Unit 2153

PJC 4/13/05



Philip J. Chea
Primary Examiner